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TWENTY-NINTH ANNUAL REPORT
OF THE
SOUTH CAROLINA
STATE BOARD OF
FISHERIES

YEAR ENDING JUNE 30, 1935

TO THE
GOVERNOR AND
GENERAL ASSEMBLY

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JOINT COMMITTEE ON PRINTING
GENERAL ASSEMBLY OF SOUTH CAROLINA

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STATE BOARD OF FISHERIES

PERSONNEL

J. M. Witsell, Chairman, Walterboro, S. C.

C. L. Young, Georgetown, S. C.

J. F. Morrall, Beaufort, S. C.

(Mrs.) Louise M. Bussey, Secretary and Bookkeeper,
Charleston, S. C., Office: 403 Peoples Office Building,
Charleston, S. C.

INSPECTORS

Chief Inspector: L. A. Hall, Beaufort, S. C.

District No. 1: J. Geo. Bailey, Ridgeland, S. C.

District No. 2: W. A. Tuten, Jacksonboro, S. C.

District No. 3: Alonzo B. Seabrook, North Charleston, S. C.

District No. 4: J. F. Bellune, Georgetown, S. C.

District No. 5: J. R. Thompson, Myrtle Beach, S. C.

REPORT

To His Excellency, the Governor, and the Honorable General Assembly of the State of South Carolina, Session 1936:

The State Board of Fisheries of South Carolina begs to submit herewith, its Twenty-ninth Annual Report.

During the past three or four years, we have endeavored to inculcate upon all those who had the opportunity to read our annual reports the vast importance of this department and the fisheries' industries of our State to the people of the State. We have a duty to you and we have tried to operate this department in a kindly manner, consistent with the responsibilities of this duty. We have endeavored to build up the various fishing industries under our supervision and we have shown an increase in revenue over last year. We feel that we have successfully completed another year in the history of this department and of our State.

We have jurisdiction of shad, sturgeon, oysters, clams, crabs, terrapin, shrimp and menhaden. We are charged with the duty of enforcing all laws pertaining to the collection of impost taxes on the products of our coastal waters, the enforcement of all closed seasons, the leasing of oyster bottoms, and the conservation and protection of our fish and shell fish in the coastal waters.

Our territorial jurisdiction extends from the Savannah River on the South to the North Carolina line on the North and from the three mile ocean limit, up the various streams to as far as the shad and sturgeon fish run. This is a large territory and keeps the full staff of the Board busy, but we are ready and willing at any time to undertake additional duties for the benefit of our State and its citizens.

There has been no change in the personnel of our department during the past year. Mr. J. M. Witsell continues as Chairman and he is constantly endeavoring to improve the department in every way possible. He spends Thursday of each week, as well as several other days during the month, at the office. The entire Board meets once each month, on the first Thursday. The office is in charge of Mrs. Louise M. Bussey, Secretary of the Board, who has a very thorough knowledge of the coastal fish-

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eries' industries as well as being well versed in the performance of the duties of her position.

The Board of Fisheries has again shown a profit to the State of South Carolina through its operations. Our expenses have been kept as low as possible and a detailed account of our financial condition will be found in the back of this report. Practically all of the counties under our jurisdiction have shown an increase in revenue and this would not be true if production had not also increased. We feel that if the General Assembly would allow this department to retain its revenue for the complete maintenance of the department and the development of same, it would be a great forward step in the promulgation of our fish and shell fish industries. It would not cost the State a cent and we feel that all money expended in the protection and development of our fisheries' industries is money well spent.

There are hundreds of acres of natural oyster beds in the State of South Carolina which could be reclaimed and which would eventually produce annually several times the amount of money spent to rehabilitate them. We need more fish hatcheries for re-stocking purposes if we are to continue to build up our fish supply,—mainly shad. The pollution of streams should be studied and steps taken to have same remedied. Pollution in a stream will bar the removal of a single oyster in that stream and, therefore, causes to be lost to the people of our State, thousands of bushels of fine oysters annually.

Many varieties of fish such as mullet, blue fish, salt water trout, sea bass, flounders, whiting, sheeps head, etc., which are natives of our coastal waters, are allowed to be caught the year around in unlimited quantities and small sizes. There is no really profitable market for these small fish and it most assuredly leads to depletion. Properly protected these delectable salt water fish would increase greatly in both size and number. We shall again make a request to the General Assembly that they pass laws protecting our commercial species of fish.

Two very fine laws were passed at the last session of the General Assembly of which we were very much in need. One law prohibits the killing of any sea turtle, the sale of any sea turtle and the gathering for sale or destruction of any sea turtle eggs. The sea turtle was fast becoming extinct and we

are indeed glad that this law has been passed and its enforcement placed under our jurisdiction. We hope to be able to show within the next few years that the supply has been substantially increased.

The other law passed was one requiring that all shad or sturgeon nets be removed from the banks of streams within three days after the close of the seasons for the catching of these fish. We believe that this law will materially decrease violation of the closed seasons and will increase the supply of both shad and sturgeon.

In April, 1926, a survey was made of the coastal waters of South Carolina for the purpose of determining the most suitable methods for conserving and building up the important oyster industry of our State. We will speak of this survey in greater detail later in this report under the heading "Oysters." Nothing very specific has ever been done, however, relative to conducting a survey to determine the number and species and methods of control of the oyster pests which attack our oysters and yearly destroy a large quantity of them. Mr. Witsell has been endeavoring for some years to have a survey of this kind made and to this end a great deal of correspondence has taken place between him and the various officials of the Government.

The present session of Congress has made a small appropriation for this work. A survey will be made in South Carolina beginning about September 1, and will continue for a period of two months. The United States Bureau of Fisheries will defray the expense of gasoline supplies and will also provide a biologist and laborer for collecting samples and making field observations. Your South Carolina Board of Fisheries will furnish a boat and captain and will cooperate with the officials in charge of this work in every manner possible.

Dr. Herbert F. Prytherch, Director of the U. S. Fisheries Biological Laboratory at Beaufort, North Carolina, will be in charge of the survey. He states that the Bureau has in mind a bounty system whereby the oystermen will be paid by measure or count for the natural enemies of the oyster such as starfish, drill, borer, etc. Needless to say, he will have the full cooperation of this department and we sincerely hope that this survey will mean that the first step has been taken in the ultimate control of the natural pests which attack our oysters.

SHAD

The shad industry continues below normal but the drop is not enough to occasion undue worry on the part of the fishermen or this department. The catch of shad last season was around forty-two thousand and this season it dropped to around forty thousand fish. There are many theories that have been advanced in this connection by the experienced fishermen, from freshets in the rivers to the straightening of the intra-coastal waterway, which, it is claimed by some, has increased the salinity of the water at the natural spawning grounds. Mr. P. G. Carnes, Acting Superintendent of the United States Fish Hatchery at Orangeburg, states that the run of fish on the Edisto River was the smallest in the history of that river, and that the percentage of ripe fish was far below normal. The total collection of eggs at our hatchery on this river was 497,000, of which 371,000 were hatched. Approximately 4,000 of the fry were placed in a pond at the Orangeburg station for experimental purposes.

Mr. Carnes states further that while the results at the Jacksonboro Hatchery were rather disappointing, that practically all hatcheries of this kind experience the same difficulties, and it is probable that next season may be the best we have ever had. He has promised his continued cooperation and we hope that next year we can indeed report a banner catch and a successful run at the hatchery.

In 1934 there were approximately four hundred and twenty shad fishermen in South Carolina. In 1935 this figure dropped to approximately three hundred and ninety fishermen. Shad fishing equipment is expensive and the shad market has been below normal for the last few years. These two facts combined with the doubtfulness of a good run of shad, tend to decrease the number of fishermen willing to equip themselves at the beginning of the season. Each year we have hoped that we would be in position to establish additional hatcheries for the restocking of our rivers, but our financial condition continues to be somewhat restricted, and this has made it impossible for us to do more than operate the one hatchery at Jacksonboro on the Edisto River.

Probably the most urgent need of our shad industry, is a change in the law regulating the closed season. We need a uni-

form season for the whole State rather than a split season which allows the season to remain open longer above the forty-mile limit. We have pointed out each successive year, the difficulties to be encountered in enforcing the law as long as it provides for a longer season above the mythical forty-mile limit. A shad caught below the forty-mile limit is not different in appearance from a shad caught above this limit. Therefore, once the fisherman gets his fish away from the river, the presumption is that the fish were not caught illegally. The law now provides that the season be open from January 15 to March 25 below the forty-mile limit but that above this limit, the season will remain open until April 20.

Most of the spawning is done late in the season around and above the forty-mile limit. A good portion of the roes reach the upper parts of the rivers, or the spawning grounds, around the time that the season closes in the lower parts of the rivers but as the season is not closed in the upper sections of the rivers, they are not allowed to rest and spawn but are caught and shipped for market. For this grave reason, we would certainly say that the present law presents a serious problem of depletion, and should be changed. South Carolina should take no chances on losing that most delectable fish—the white shad.

OYSTERS

Oysters were a valuable food resource in the early struggles of the Pilgrim Colonists against starvation. They found them growing everywhere and this bivalve was probably an important item on their menu. They deemed the oyster so important that before the end of the seventeenth century, laws were passed for the protection of the oyster beds. As time went on, however, the natural beds were depleted and the first steps were taken to produce oysters by cultivation. Since that time methods have improved and oyster farming has become an important industry on both the east and west coasts. This has increased the production, improved their quality and converted thousands of acres of worthless and useless bottoms into valuable food-producing areas.

Three species of oysters are being cultivated in the United States. The most important of these, *Ostrea virginica* or the

so called "eastern oyster," occurs naturally on the Atlantic and Gulf coasts and comprises 99 per cent of the annual yield. The oyster is easily cultivated. It is unable to move of its own volition from the beds on which it is placed and it can withstand rough handling and long exposure to air. Research has shown that a single female oyster may produce under favorable conditions as many as 100,000,000 to 500,000,000 eggs during one season. The eggs are microscopic in size ($1/500$ of an inch in diameter) and occupy so little space that it would be possible to place in a one-quart bottle enough to supply our annual oyster crop of over 20,000,000 bushels. The time of spawning varies from year to year and in certain coastal areas has been found to occur during certain phases of the moon. In South Carolina oysters generally spawn from six to nine days after either the full moon or the new moon, during the spawning season, which occurs in the late Spring. During certain seasons the oysters become filled with eggs again during the summer months and spawn for a second time the latter part of September.

The operators in South Carolina planted 598,218 bushels of oyster shell during the past shell planting season. The oyster larva forms a large supply of sticky material by which it anchors and cements itself to an old shell or some other convenient clean surface. The oyster shell is planted in order that the larva may attach itself to these shells and in this way a future supply of oysters will be built up. Sometimes a single shell will collect from a few hundred to several thousand spat and while there is not growing room for this number, probably twenty to twenty-five will survive and grow. The surviving number are of necessity closely cemented together but they can be broken apart and transplanted to other areas where there will be room enough for them to grow.

The operators also planted this year 11,825 bushels of seed oysters. These seed oysters were removed from sloughs, gullies and small streams, and in their first homes would not have had a chance to grow and develop properly. By removing them, however, and placing them in deep water or on suitable shore bottoms, they will eventually become good marketable oysters and in their turn will help in the production of finer oysters.

The oyster is a heavy drinker, especially during the warmer months, when he pumps through his gills 15 gallons of water per day, from which is extracted practically all of the oxygen and suspended food materials. The oysters in the coastal waters of the United States, consume in the aggregate, approximately ten times as much water daily as is used by the entire population of the United States in the same period of time for domestic purposes.

The oyster is one of the finest health giving foods in the world. Besides being a good source of vitamins A, B, C and D, it contains in rather high concentration various inorganic elements which have been studied in connection with nutritional anemia. Iron, copper, zinc, lead, arsenic and iodine, are present in oysters. Besides these, other metallic elements are probably present.

SHRIMP

While the shrimp ranks high among the fisheries of the United States, it is preeminent among those of the South Atlantic and Gulf States. Among eight coastal States it ranks first in value, being followed by the oyster and mullet.

The shrimp is an "annual" being spawned in the Spring or Summer, spawning at the same season of the following year, and then passing out of the fishery. Its extended breeding season, however, and the large number of eggs produced are factors very favorable to the shrimp, since they render almost impossible the failure of an entire breeding season.

During the past season 153 shrimp boats operated in South Carolina waters. Last year there were 142. We have again had a very material increase in the number of pounds of shrimp caught. There were 4,455,212 lbs. of shrimp caught (heads on), and 3,423,226 ozs. of shrimp were canned. The shrimp industry paid a net revenue to the State of \$5,342.28 this year as against a net revenue of \$3,912.08 last year. Besides the revenue derived from the shrimp industry through the sale of licenses and impost tax stamps, which goes direct to the State Treasury, the shrimp industry pays out large sums of money during the open season for labor, gasoline, oil, food supplies, repairs to boats, etc.

Last winter there was some agitation in an effort to have a Bill passed in the General Assembly which would place a much larger license fee on the non-resident shrimp boat and net. The Board of Fisheries is very much in sympathy with these plans but they do feel that the license fee should not be placed at a prohibitive figure. We have requested for some years that the shrimp boat and net licenses be increased as to non-residents and have suggested varying amounts. We believe that a \$10.00 shrimp boat license and a \$10.00 shrimp net license for non-residents and the present \$5.00 shrimp boat license and \$5.00 shrimp net license for residents of our State, would be entirely fair to all concerned. Through our investigations we have found that other States charge a much higher non-resident license than a resident license.

Market prices were very poor last season. We are in hope, however, that they will be better during the coming season. We understand that a number of shrimp companies which have not fished in South Carolina before, are coming here this year. This will enable us to keep our shrimp boat and shrimp net revenue up to last year and with good market prices, we would be able to show a substantial increase in revenue from the shrimp industry.

CLAMS

The 1934-35 clam season was very satisfactory. Due to the closed season from 1930 to 1933, the clam supply was very much replenished and this year 5,112 bushels of clams were marketed. This is somewhat better than last year and we hope that we will be able to show a still further increase next year. The following figures will give you an idea as to how the clam industry has progressed in South Carolina during the past three years:

	No. Licenses	Impost Tax Tag Sales
1933	1	\$ 3.70
1934	4	525.60
1935	7	565.40

We are requesting that the Legislature place a tax of two cents on each sixty ounces or fraction thereof, of clams canned. This tax will not be burdensome to the operator of a canning plant

and represents a just proportion of the cost of supervision and enforcement which should be borne by this industry.

STURGEON

The sturgeon industry managed to hold its own this year. Most of the sturgeon marketed during the season were caught in Georgetown County. The run on the Edisto River in Colleton County was very poor. A total of 877 fish were shipped to the markets during the past season. The caviar yield was much higher this year than last, 149-1/2 lbs. being shipped this year against 46 lbs. last year.

The market price for sturgeon continues low. There were three more licensed nets this year than last, however, and we hope that this is an indication that interest in the sturgeon industry is growing.

OYSTER LAND AND LEASES OF SAME

The board has a dual function in so far as all of its activities are concerned; the first being to secure a reasonable amount of revenue for the State, and the second, its duty to conserve, develop and make useful to the people of the State, the vast potentialities of the products of the salt waters of South Carolina. It fully realizes the value of the oyster industry and the importance of wisely handling it for the people of our State. We believe that the policy of leasing oyster beds and bottoms is the most wise procedure for the State and for the operator. Leases are issued at a nominal rate of rental for a period of five years. Practically all of the leases have a sliding scale of rental but conditions have been so bad during the last three or four years that the Board has not deemed it wise to enforce a higher rental than that called for during the first year of the lease. This policy has enabled the operators to hold their leases, keep their shucking sheds and factories running and has insured for the State the proper care of their oyster beds. This year a large amount of oyster shell and seed oysters was planted. Each year the value of our oyster industry has been growing.

There are two distinct classes of oyster lands, one of which is referred to as the "bottoms" and is covered by from one

foot to twenty feet of water. The other is known as "shore" lands, which lands are from low water mark to high water mark, being covered at high water and exposed to the sun and air at low water. The two classes of oyster bearing lands must be developed differently and will yield different products. The "bottom" land is more suitable for the development of single oysters. The "shore" lands are most adapted to the cultivation of the cluster or racoon oysters. These so called racoon oysters are generally used for canning purposes.

The Board now has under lease 4,616.97 acres of oyster land. Some of the leases cover "bottoms" and some of them cover "shore" lands. The operators of the canning factories hold most of the shore leases and the shucking shed operators, of course, prefer leases covering bottoms where they can develop a much larger oyster. We have a number of applications for leases of oyster land on file and as soon as the proper legal procedure has been complied with, these leases will be granted.

MENHADEN

During 1934 there were approximately 3,000,000 menhaden fish, or 10,000 barrels, caught in the coastal waters of South Carolina. Menhaden fishing, as practiced along the Atlantic coast, is purse fishing, being done with the aid of purse boats and purse nets. A "set" is made around the fish when the school is sighted. This school, as may be conceived, may be large or small, and for this reason a few sets may be made or six to eight sets made, in order to get a boat load of fish. On rare occasions one, two or three sets may be all that is necessary to get a boat load. Such catches, however, are the exception rather than the rule. It is readily conceived that it would be a rare occasion to have fishing so good, or weather so favorable, as to permit the boats to load each day. A catch, or the absence of a catch, from a very few fish up to the boat's capacity, can be expected to vary with luck, weather conditions, well equipped rig and the abundance of the fish. The operators realize that there will be poor years during which time the catch is small and fishing is done at a loss to both fishermen and operators, but there will be years when the catch will be such that operation can be done at a profit.

Menhaden fishing is the most humane, or perhaps we should say "fishane," fishing that is done with nets. In fishing for menhaden the small edible fish are not destroyed as is done with trawl, dray, drift or set nets. Only menhaden and the enemies of menhaden are caught.

The fish are taken from the boats, on reaching the fish factory, by a large upright bucket elevator. The stevedores shovel the fish into this elevator. Through a number of elevators, the fish are made to pass through a large steam cooker, where the fish are cooked with and by live steam; through a curb press, at which place the oil and a part of the water is pressed from the fish flesh, and through a third elevator to the storage room if the material manufactured is to result into acidulated fish scrap for fertilizer purposes. At this time 60% B. E. sulphuric acid is added. In the event the fish flesh is to be used as a feeding material, the process continues through a drying plant at which time the moisture of the fish is dried to 10% and then ground very fine and bagged. No sulphuric acid is ever put into the feed material in any stage of its manufacture.

There are, therefore, two basic uses for the fish carcass; fertilizer and feed. Many books have been written on the advantages of fish for either fertilizer or feed. For either purpose, fish stands at the head of the class and commands a premium over other material.

The oil being pressed from the fish as they are forced through the curb press is mixed with water, and fine flesh particles. This oil is pumped through a rotating screen, in order to remove as much of the flesh particles as possible, into settling tanks. The oil being lighter, rises to the top of the tanks and is washed through hot water, finally being collected in cooking tanks where the cooking process begun in the fish cooker is completed. It is then pumped through filter presses that remove the final amount of water and/or flesh particles. This is done to keep the oil "sweet" or to prevent deterioration. The oil is then stored for shipment if/and as sold in tank cars.

There are many uses for menhaden fish oil. The most important are: soap manufacturing, paint trade, rug manufacture, steel industry (tempering of steel), leather industry (tanning of patten leather), and as a substitute for cod liver oil. This last is just being brought into use. The Brunswick

Navigation Company, located at Southport, N. C., manufacturers of menhaden fish products, state that they have worked with the North Carolina State College of A & E for four years, on the use of menhaden oil as a substitute for cod liver oil, and report that this use for menhaden oil seems very promising.

Japanese herring fish meal has become a real menace to both the farmer, in selling cotton seed meal and soy bean meal, and to the American fisherman in selling his fish scrap or fish meal. An effort will be made to have Congress enact restraining legislation on such imports.

TERRAPIN

This industry seems to be very much on the upgrade and we believe that in a few years it will again be a very thriving and important industry in this State. During 1933 there were only 330 terrapin shipped for market. During the past season 4,951 terrapin were sold locally or shipped to the northern markets. The total revenue to the State from this industry in 1933 was \$74.60, with but two licensed pens. This year the total revenue was \$382.30 and there were five licensed pens.

The dealers received this year, an average of eight to ten dollars a dozen for the six inch terrapin and from two and one-half to three dollars a dozen for five and one-half inch terrapin. The prices paid this year were still low in comparison with prices paid before the Volstead law was passed, but since this law has been repealed we believe that in time the terrapin market will reach its former level as the demand increases for these diamond backs.

In 1933, through the efforts of Mr. J. M. Witsell, Chairman of the Board, this department received an allotment of 2,000 young diamond back terrapin from the United States Terrapin Hatchery at Beaufort, S. C. for distribution in the waters of our State. Since that time we have received a shipment each year. On April 29, 1935, 1,000 young terrapin were shipped to Chief Inspector L. A. Hall at Beaufort, S. C. and he distributed them in Beaufort County as follows:

In Station Creek marshes, shore marshes and small creeks, creek marshes known as the "short," between Ladies Island and St. Helena Island, 300; along causeway marshes near Frogmore, 150; Station Creek marshes covering an area of five miles, 300;

Battery Creek marshes, 100; in marshes of salt water creeks, 150. These terrapin were distributed over an area of about fifty miles.

A shipment of 1,000 terrapin were shipped to Charleston, and Inspector A. B. Seabrook placed these in Toogoodoo and Log Bridge Creeks.

We believe that the terrapin industry will continue to grow from season to season and the fine record of this year makes us feel that our many efforts at conservation of this industry during the more than ten years, when there was no demand for the diamond back from South Carolina, were justified.

CRABS

This crustacean is very numerous in our waters and except for the small number caught for local consumption, has never been used much commercially. During the past year, however, interest in this industry has been steadily growing. Crab meat is a delicacy and there is nothing finer in the way of sea food than a properly cooked soft shell crab. There were 1,042 gallons of crab meat and 1,761½ dozen soft shell crabs marketed in South Carolina this year. Nine dealers were engaged in this industry.

LAW ENFORCEMENT

The Board of Fisheries has done all in its power to enforce the commercial fishing laws of the State during the past year. There were one hundred and three (103) cases made for violation of these laws. A number of illegal nets and small bateaus have been confiscated. A total of \$783.85 was collected and turned into the State Treasury from this source.

A number of those arrested were convicted but went to jail in lieu of paying their fines. Some were acquitted and a few were allowed by the Magistrates to escape paying a fine if they would purchase their licenses immediately. This was done mainly in the cases of those who had never been arrested for a violation of the fisheries' laws before. Some of the defendants have appealed their cases to a higher court and some of the cases made during the latter part of the year have not yet been tried. The results from these cases will be shown in our next annual report.

BOATS

No changes have been made in the fleet of boats now owned and operated by the State Board of Fisheries. Necessary repairs have been made to these boats, however, and we have endeavored to keep them in as good condition as possible. We are greatly in need of one or two additional fast boats but we have not been able to purchase them, for lack of funds.

The following is a list of the boats now being used:

Two Sea Dory's with outside motors. (Both in fair condition.)

One Sea Skiff, 22' 6'' long. (In fair condition.)

One Cabin Cruiser, 27' long, equipped with Red Wing Motor. (Fair condition.)

One Cabin Cruiser, 24' long, equipped with 12 HP motor. This boat is extremely old and practically worthless.

One Cabin Cruiser, 39' long, equipped with 40 HP Lathrop Engine. (Good condition.) This last boat was obtained in 1934 through the efforts of the Chairman of the Board, Mr. J. M. Witsell, from the United States Government, with the valued assistance of Mr. Charles E. Jackson, Deputy Commissioner of the United States Bureau of Fisheries. We are greatly obligated to Mr. Jackson for his untiring efforts in obtaining this boat for us, free of cost, as the department badly needed it.

REQUESTS

1. We request that the General Assembly pass an Act changing the open season on shad from January 15 to March 25, to February 1 to April 1 and that this Act be made to apply to the entire State. This would mean that the closed season on shad fish would be effective in all of the waters of South Carolina at the same time. It would be most beneficial in the enforcement of the law and would prevent the yearly depletion of shad during the spawning season.

2. That the State Board of Fisheries be given the power to employ all District or Assistant Inspectors and to do away with their services when not necessary. It is impossible to obtain the maximum efficiency from men whom you have no power to discharge for non-performance of duty.

3. That the price of the Swimming Fish License be increased from \$2.50 to \$5.00. This is a nominal price and is far below the price charged in most other States. The swimming

Fish License allows a person purchasing same to fish for all salt water fish with the exception of sturgeon.

4. That the license for non-resident shrimp boats be increased from \$5.00 to \$10.00. That the license for shrimp nets used on non-resident boats be increased from \$5.00 to \$10.00. That the resident shrimp boat licenses remain at \$5.00. That the license for shrimp nets used on resident shrimp boats remain at \$5.00.

5. That a tax of \$1.50 per bateau be imposed on all bateaus used for taking oysters.

6. We renew and urgently recommend that a tax of five cents per gallon be imposed on all raw oysters sold in South Carolina, and a tax of two cents for each sixty ounces of canned oysters sold in South Carolina. These are the present taxes on South Carolina oysters and it is only fair to South Carolina producers that it be passed, so as to bear equally on imported oysters.

7. That the license on Gill Nets be increased from \$0.25 per 100 yards to \$0.50 per 100 yards. The price of the license would still be very nominal with the increase.

8. The present law requires that Shad sets be placed not closer than two hundred (200) yards apart. We ask that this be changed so as to prohibit sets being placed closer together than four hundred (400) yards.

9. That an Act be passed increasing the following licenses:

Shrimp Cannery's License	from \$1.00 to \$5.00
Raw Oyster-in-Shell Shippers' License ..	from \$1.00 to \$5.00
Raw Oyster Shucking Shed License	from \$1.00 to \$5.00
Oyster Cannery's License	from \$1.00 to \$5.00
Clam Cannery's License	from \$1.00 to \$5.00

10. That an Act be passed placing a license of \$15.00 on each Barge or Lighter, used in gathering oysters, of five (5) tons and over. That a license of \$4.50 be placed on Barges or Lighters of less than five (5) tons. These amounts have been collected for many years but we have been unable to find the law covering them.

11. That an Act be passed fixing the penalty for violation of any of the above Acts at \$50.00 on each offense or thirty days' imprisonment.

12. That an Act be passed licensing Dredges carrying 600 bushels or more of oysters, said license to be \$25.00. That on

Dredges carrying less than 600 bushels a license of \$20.00 be required and we ask further that a penalty for violation of same be provided.

13. We ask that the following Proviso be withdrawn for the reason that people are abusing said Proviso, selling fish in quantities of from fifty to three hundred barrels and we have been unable to get convictions for this rank violation on account of this Proviso.

Section 70—LICENSES ON FISHERMEN

An annual license tax for the year beginning as hereinafter shown shall be required of each person who shall engage in any of the following industries for market.

Crabs, beginning January 1, \$5.00; Swimming Fish from salt water, beginning January 1, \$2.50; Shrimp, beginning January 1, \$5.00; Sturgeon, beginning with the open season, for residents, \$60.00; Terrapin, for each place of business, \$25.00.

PROVIDED, THERE SHALL BE NO TAX LEVIED OR COLLECTED FROM ANY BONA FIDE CITIZEN OF THE STATE TO TAKE FISH, CRABS, SHRIMP OR OYSTERS, FOR SELF OR FAMILY OR FOR SALE OF THE INDIVIDUAL CATCH AT RETAIL ON LOCAL MARKET.

14. We ask that a license be placed on drag seines of 100 to 300 yards or over, and that the tax be \$25.00. That for violation of not purchasing this license a penalty of not less than \$50.00 fine or thirty days' imprisonment be imposed. These are large seines and require anywhere from fifteen to twenty men to operate them and they gather loads of fish from the waters.

15. We ask that a license be placed on all drag or haul seines of less than 100 yards in the amount of \$10.00. For violation of this provision we ask that a penalty of not less than \$50.00 fine or thirty days' imprisonment be imposed.

16. We urgently recommend that a tax of two (\$.02) cents for each sixty (60) ounces of clams canned be imposed. There is no tax on canned clams at present.

All of which is respectfully submitted,

J. M. WITSELL, Chairman
C. L. YOUNG
J. F. MORRALL

Attest:

MRS. LOUISE M. BUSSEY, Secretary,
Charleston, S. C., June 30, 1935.

Appropriation for 12 months, July 1, 1934- June 30, 1935	\$18,580.00
Amount of Appropriation spent during this period	\$17,171.68
Amount of Appropriation not used	1,408.32
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	\$18,580.00
Receipts: July 1, 1934-June 30, 1935	\$25,980.88
Receipts	\$25,980.88
Money Spent	17,171.68
	<hr/>
Net Profit	\$ 8,809.20

	1933-34	1934-35
Shrimp Caught (lbs.)	3,817,919	4,455,212
Shrimp Headed (lbs.)	1,582,105	2,047,876
Shrimp Canned (ozs.)	4,536,456	3,423,226
Oysters Gathered in Shell (bus.) ..	655,073	621,306
Oysters Shucked Raw (gals.)	33,654	39,454
Oysters Canned (ozs.)	24,196,140	21,237,850
Number Shad Caught (white)	41,811	39,822
Number Shad Caught (hickory) ..	1,652	1,292
Number Terrapin Caught	478	5,789
Number Terrapin Shipped	330	4,951
Oyster Shell Planted (bus.)	1,195,020	598,218
Seed Oysters Planted (bus.)	118,524	11,825
Number Sturgeon Caught	890	877
Number Pounds Caviar	46	149½
Oyster Land Under Lease (acres)	4,567.58	4,616.97
Clams Sold (bus.)	4,946	5,112
Crab Meat Sold (gals.) .....	.....	1,042
Soft Shell Crabs Sold (dozs.) .....	.....	1,761½

REVENUE FROM DIFFERENT COUNTIES ITEMIZED

	Charleston	Beaufort	Colleton	Georgetown	Horry	Dorchester	Jasper
Canned Oyster Stamps	\$ 3,597.60	\$3,834.96	.....	.....	.....	.....	.....
Raw Oyster Stamps	203.24	1,728.33	.....	\$54.40	\$21.75	.....	.....
Oyster-in-Shell Tags	57.40	13.40	.....	5.40	66.10	.....	.....
Clam Tags	8.50	10.00	.....	.30	546.60	.....	.....
Hickory Shad Tags	3.50	.....	.....	29.80	6.34	.....	.....
Shad Tags	448.50	208.50	\$83.40	1,209.70	128.70	\$4.80	.....
Terrapin Tags	237.80	19.50	.....	.....	.....	.....	.....
Raw Shrimp Tags	1,363.53	901.04	.....	407.83	.....	.....	.....
Cooked Shrimp Stamps .....	.....	638.88	.....	.....	.....	.....	.....
Registered Boat Licenses	267.00	367.50	.....	.....	.....	.....	.....
Non-Registered Boat Licenses	18.00	93.00	.....	.....	.....	.....	.....
Swimming Fish Licenses	305.00	230.00	147.50	335.00	332.50	.....	.....
Shrimp Boat Licenses	365.00	520.00	.....	40.00	.....	.....	.....
Shrimp Net Licenses	365.00	520.00	.....	50.00	.....	.....	.....
Oyster Canner's Licenses	2.00	2.00	.....	.....	.....	.....	.....
Gill Net Licenses	37.00	36.50	21.25	67.50	24.25	.....	.....
Terrapin Pen Licenses	75.00	25.00	25.00	.....	.....	.....	.....
Shad Buyer's and Shipper's Licenses	75.00	25.00	25.00	125.00	75.00	.....	.....
Sturgeon Net Licenses .....	.....	9.00	18.00	117.00	.....	.....	.....
Sturgeon Buyer's and Shipper's Licenses .....	.....	.....	.....	120.00	.....	.....	.....
Oyster Shucking Shed Licenses	10.00	15.00	.....	.....	2.00	.....	.....
Clam Buyer's and Shipper's Licenses	5.00	5.00	.....	5.00	20.00	.....	.....
Oyster Land Rent	812.08	1,435.45	225.00	73.20	.....	.....	.....

Fines	315.00	259.85	1.50	73.00	86.50	28.00	\$20.00
Raw Oyster-in-Shell Shipper's Licenses	6.00	.....	.....	.....	.....	.....	.....
Oyster Picker's Bateau Licenses	99.00	202.50	.....	19.50	30.00	.....	.....
Crab Licenses	25.00	5.00	.....	15.00	.....	.....	.....
Shrimp Buyer's and Shipper's Licenses	75.00	45.00	.....	50.00	.....	.....	.....
Barge Licenses	30.00	222.00	.....	.....	.....	.....	.....
Crab Meat Stamps	17.00	5.00	.....	.20	.....	.....	.....
Soft Shell Crab Stamps	40.50	.....	.....	.....	.....	.....	.....
Hard Shell Crab Tags .....	.....	.....	.....	.30	.50	.....	.....
Shrimp Canner's Licenses .....	.....	1.00	.....	.....	.....	.....	.....
Menhaden Licenses .....	.....	.....	.....	.....	982.00	.....	.....
Dip Trap Net Licenses .....	.....	.....	.....	.....	18.00	.....	.....
Terrapin Canner's Licenses	1.00	.....	.....	.....	.....	.....	.....
Totals	\$ 8,864.65	\$11,378.41	\$546.65	\$2,798.13	\$2,340.24	\$32.80	\$20.00